REMARKS

Claims 1-8, 10-13, 16, 17, 20 and 22 would remain in the case after entry of this Supplemental Amendment. Claim 21 is being canceled, without prejudice or disclaimer.

Applicants submit that the claims remaining in this application are supported by the Japanese priority application discussed below, and that this removes as a reference the Flohr et al. published application on which all rejections relied in whole or in part.

Applicants claimed priority to Japanese patent application JP 2004-080939 filed on March 19, 2004. The Office acknowledged the priority claim and the receipt of the certified copy of this priority application. A translation of the priority application into English is submitted as Appendix A attached hereto.

Figs. 1-7 of this application also are Figs. 1-7 in the translation of the Japanese priority application attached hereto as Appendix A. Embodiment 1 described in this application in pages 6-17 is the embodiment disclosed in the Japanese priority application. The claims remaining after entry of this Supplemental Amendment are supported by said embodiment 1, as discussed in detail below. Therefore, the remaining claims are entitled to priority to a date earlier than the date as of which the Flohr et al. reference. (US Patent Publication 2005/0058238 A1) is effective as prior art. Because the rejection of each of the remaining claims was based in whole or in part on Flohr et al., applicants respectfully request the withdrawal of those rejections.

Non-limiting examples of support for the remaining claims is found in the English translation of the Japanese priority application attached hereto as Appendix A as follows, when considered in the context of the entire disclosure of the priority application:

Claim 1:

- Preamble: Fig. 2 illustrates an image collection control method as recited in the preamble of claim 1, and Fig. 1 illustrates a system for carrying out the method. The Japanese priority application discusses Fig. 1 in paragraphs [0013- - [0016] of the English translation, and discusses Fig. 2 in paragraphs [0017] – [0022];

- First recited step ("obtaining periodic motion data ..."): *See* step S208 in Fig. 2, the illustration of Fig. 3, and the discussion thereof in paragraph [0024];

- Second recited step ("obtaining at time range ..."): *See* step S214 in Fig. 2 discussed in paragraph [0024]. *See also* Fig. 5 (time range from 8.5 seconds to 19.0 seconds from breadth holding start, and the discussion thereof in paragraphs [0028] – [0029], and Figs. 6 and 7 where, as discussed in paragraphs [0032] – [[0040], a marker S indicates a planned start time of image data collection and a marker E indicates the planned end time of image data collection;

- Third recited step ("controlling an image data collection ..."): *See* step S220 in Fig. 2 and the discussion thereof in paragraph [0020]. *See also* paragraphs [0041] – [0044] discussing control over image data collection; and

- Last recited step ("starting the image data collection ..."): *See* step S220 in Fig. 2 and paragraph [0041].

Claim 2:

- First recited step ("projected image obtaining ..."): *See* step S212 in Fig. 2 and paragraphs [0019], the projected image of lungs in Figs. 6 and 7, and the discussion of the projected image in paragraphs [0032] – [0038]; and

- Second recited step ("image data collection range designating step ..."): *See* step S214 and paragraph [0019]. *See also* Figs. 6 and 7, and the discussion of adjusting the position of the start and end markers S and E relative to the projected image P in paragraphs [0032] – [0038].

Claim 3:

- Sole step (in which "the image data collection range is designated by designating a start position and an end position … in the projected image …"): *See* step S214 and paragraph [0019]. *See also* the projected image P of lungs in Figs. 6 and 7 and the discussion of adjusting the position of the start and end markers S and E relative to the projected image P in paragraphs [0032] – [0038].

Claim 4:

- Sole step (which includes "estimating a fluctuation in a time resolution …"): *See* Figs. 4 and 5, in which estimated time resolution is the vertical axis, and Figs. 6 and 7, in which time resolution is the horizontal axis, and paragraphs [0024] – [0028].

Claim 5:

- Sole step (in which "the desired time resolution range in the time resolution graph is superimposed …"): *See* Figs. 6 and 7, where the time resolution curve is superimposed on the data collection range in image P, and paragraphs [0031] – [0042].

Claim 6:

- Sole step (in which "points ranging from a start position … in the time resolution graph … are respectively superimposed on … positions of image data collection in the projected image …"): *See* Figs. 6 and 7, where markers S and E are superimposed on image data collection positions in image P, and paragraphs [0031] – [0042].

Claim 7:

- Image data collection range designating step (in which "input is received for designating or changing ..."): *See* Figs. 6 and 7, and the discussion of designating of changing by operator action in paragraphs [0034] and [0037].

Claim 8:

- Image data collection range (in which "a numeric value indicating a position on the projected image is displayed ..."): *See* Figs. 6 and 7, where numeric values in mm units are displayed; and
- Input is received ("to change the numeric value ..."): *See* Figs. 6 and 7, and the discussion of changing the numeric values in paragraphs [0034] and [0037].

Claim 9 (canceled).

Claim 10:

- Image data collection position control step (in which "the image data collection range and the image data collection position are relatively moved ..."): *See* Figs. 6 and 7, and the discussion of operator action moving the image date collection range and position in paragraphs [0032] - [0041].

Claim 11:

- First recited step ("determining a suitable change ..."): *See* the discussion of providing a time resolution in a suitable range in paragraphs [0029] and [0035] - [0036]; and
- Second recited step ("displaying a change ..."): *See* displays in Figs. 6 and 7.

Claim 12:

- Image data collection condition setting step (in which "a combination of the suitable change and a speed of the relative movement is calculated …"): *See* step S214 in Fig. 2 and paragraph [0019]. *See also* Figs. 6 and 7, where numeric values in mm units are displayed; and

- Image data collection position control step("the image data collection range and a collection position of the image data are relatively moved …"): *See* Figs. 6 and 7, and the discussion of changing the numeric values in paragraphs [0034] and [0037].

Claim 13:

- Periodic motion data obtaining step (where the step "is repeated …": *See* steps 208- S210 in Fig. 2 the discussion of providing a time resolution in a suitable range in paragraphs [0029] and [0035] - [0036].

Claim 14 (canceled).

Claim 15 (canceled).

Claim 16:

- Preamble: Fig. 1 illustrates an image collection system. The Japanese priority application discusses Fig. 1 in paragraphs [0013- - [0016] of the English translation;

- Periodic motion obtaining means: *See* steps S200-S212 when carried out by the apparatus of Fig. 1, and *see* controller 50 when configured to command the acquisition of data of the type illustrated in Figs. 3-5;

- Image data collection condition setting means: *See* step S214 when carried out by the apparatus of Fig. 1, and *see* controller 50 when configured to command the setting of data collection conditions;
- Image data position control means: *See* steps S214 when carried out by the apparatus of Fig. 1. *See also* scanner 20 in Fig. 1, and the display of parameters in Figs. 6 and 7;
- Image date collection means: *See* steps S220-S228 when carried out by the apparatus of Fig. 1, and *see* controller 50 when configured to acquire CT image data.

Claim 17:

- Image data collection condition setting means (which "estimates a fluctuation ..."): Controller 50, including electrocardiographic data processing means 58, when configured to carry out steps S200-S214; and
- Image data collection condition setting means (which "superimposes a time resolution ..."): Controller 50, including display 62 showing the superposition of time resolution graph G and projected image P.

Claim 18 (canceled).

Claim 19 (canceled).

Claim 20:

- X-ray CT apparatus: *See* Fig. 1 and the description of a CT system comprising scanner 20 and controller 50 in paragraphs [0013] – [0016] and [0047];
- X-ray source 22, X-ray detector 28, object 1, controller 50 controlling rotating means 32, table 24, table controller 26, image processing means 56, and display means 62;
- Periodic motion data obtaining means 36 and controller 50; and

- Image data collection condition setting means: controller 50 when configured to carry out steps S200-S214.

Claim 21 (canceled).

Claim 22:

- Preamble -- Image data collection system: CT scanner system illustrated in Fig. 1 when carrying out steps of Fig. 2;
- Device for displaying a graph ...: display 62 when the CT system of Fig. 1 is configured to carry out steps of the method illustrated in Fig. 2.

In view of the remarks hereinabove, applicant submits that the application is allowable. Accordingly, applicant earnestly solicits the allowance of the application.

The Examiner is respectfully requested to call the undersigned attorney, with any suggestions or request that may advance prosecution of this application.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Patent Office is hereby authorized to charge any required fees in connection with this amendment, and to credit any overpayment, to our Deposit Account No. 03-3125.

Respectfully submitted,

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